



**Choosing Wisely
Australia**

An initiative of NPS MedicineWise

INNOVATION FUND PROJECT



**BETTER
CARE
VICTORIA**

Choosing Wisely
Implementation Toolkit
Introduction

 **NPS
MEDICINEWISE**



CONTENTS

Introduction

Benefits for you

Background

What is Choosing Wisely

Who is NPS MedicineWise

Acknowledgement

What is this toolkit?

Chapters

Who is this toolkit for?

Beginner

Experienced

How to use this toolkit

Modular learning

When to use the toolkit's chapters

Beginner

Experienced

Introduction

Welcome to the *Choosing Wisely Implementation Toolkit*.

This toolkit has been developed as the key resource for health services implementing projects to address unnecessary tests, treatments and procedures as part of the Choosing Wisely Australia initiative.

It is recommended that this toolkit be used alongside project management methodologies and quality improvement frameworks supported by your health service.

Benefits for you

We expect that the information, advice and assistance provided by this toolkit will give you knowledge and skills that will help your Choosing Wisely project to be as successful as possible.

The toolkit has been developed based on the expertise of NPS MedicineWise and experiences of health services who have implemented the Choosing Wisely initiative and draws on their learnings and insights.

As a professional experienced in the healthcare sector, you may feel you already know how to make your Choosing Wisely project a success. Indeed, much of what's needed is a matter of common sense.

However, there are also things that may not be obvious and need to be highlighted by experts in behaviour change and implementation science and people who have implemented their own projects.

Tip

For example, did you know that it's best-practice to:

- Collect data and evaluate from the start of your project, not just at the end?
- Consider interventions other than clinical education to achieve improvement, such as changes in workflow and the workplace environment?
- Increase the potential of your impact through targeted change management activities?
- Discover the behaviour drivers of your target audience in the process of choosing a topic and relevant interventions?

You may regard such things as 'nice to have' rather than essential for your project. But we know through our expertise and experience that the extra effort is worth it in the long run.

Background

What is Choosing Wisely?

[Choosing Wisely](#) is an international movement operating in more than 20 countries to improve conversations between health professionals and consumers about available and appropriate health diagnostic and management options. Choosing Wisely is governed by the following principles:

- 👉 health profession-led
- 👉 emphasis on improving quality of care
- 👉 patient-focused
- 👉 evidence-based
- 👉 multidisciplinary
- 👉 transparency.

[Choosing Wisely Australia](#) was launched in 2015 as an initiative of NPS MedicineWise (see ‘Who is NPS MedicineWise?’ below for more details) in partnership with Australia’s health professional colleges, societies and associations.

The initiative brings together these health professional bodies, health services, clinicians and other healthcare providers, researchers, consumer advocates, consumers and the media in a national dialogue to shift the culture around low-value and unnecessary healthcare in this country.

It enables clinicians, consumers and healthcare stakeholders to start important conversations about tests, treatments and procedures where evidence shows they provide no benefit, or in some cases, lead to harm.

Choosing Wisely Australia has [Champion Health Services](#) throughout the nation who take up the initiative and put it into practice. Many of them are health services in Victoria that have been funded by the Better Care Victoria Innovation Fund. (See [Acknowledgment](#) below)

Who is NPS MedicineWise?

[NPS MedicineWise](#) is an independent, not-for-profit and evidence-based organisation that works to improve the way health technologies, medicines and medical tests are prescribed and used in Australia.

NPS MedicineWise launched Choosing Wisely Australia in 2015, adding to its suite of quality improvement programs and services for health professionals and consumers.

Key activities include:

- growing engagement through recruitment and support of member and supporter organisations
- leveraging NPS MedicineWise programs and services to promote Choosing Wisely recommendations and principles, and evaluating impact
- hosting and supporting regular forums with members to promote implementation, including the annual Choosing Wisely National Meeting
- leading and supporting the “community of practice” Champion Health Services network providing access to resources including NPS MedicineWise program materials, communications kits, evaluation tools partnering with consumer organisations to drive consumer engagement activities and development of consumer resources
- targeted communications via newsletters, social media and media.

As custodian of Choosing Wisely in Australia, NPS MedicineWise sets the strategy for implementation and evaluation, guided by an international framework for the initiative and informed by the Choosing Wisely Advisory Group.

Acknowledgement

The [Better Care Victoria](#) Innovation Fund has provided funding for health services in Victoria through the [Choosing Wisely Scaling Collaboration](#) project, whose primary objectives are to:

- establish a sustainable framework to measure low value care and impact of interventions designed to reduce low value care practices
- decrease the proportion of low value care practices delivered in health services by reducing unnecessary requesting of tests, treatments and procedures.

The content of this toolkit, funded by Better Care Victoria Innovation Fund, was developed based on the expertise of NPS MedicineWise and experiences of the health services in Victoria participating in the Choosing Wisely Scaling Collaboration.

What is this toolkit?

Chapters

The content in this toolkit is divided into 5 key areas, with each area presented as a separate chapter of the toolkit:

- 📌 Governance
- 📌 Change management + Communications
- 📌 Design
- 📌 Evaluation
- 📌 Interventions.

Each chapter itself:

- 📌 largely provides you with practical information, tools and resources
- 📌 includes some theory and explanations
- 📌 is illustrated by case studies of Choosing Wisely projects recently implemented by health services in Victoria.

Who is this toolkit for?

Your health service may be regarded as having two levels of experience with Choosing Wisely projects:

Beginner

You're intending to implement a Choosing Wisely project for the first time. This toolkit will help you get started and keep you on track throughout the process.

Experienced

You've already implemented a Choosing Wisely project or projects. This toolkit will help you review what you've done and either reinforce that it was on the right track or help you make changes where necessary.

How to use this toolkit?

Modular learning

This toolkit is based on a modular learning style, which:

- provides best-practice information, tools and resources

at the same time as:

- being self-directed
- enabling you to customise using the content according to the needs of your project
- empowering you to assess, make decisions on and take actions to address your project's needs.

Modular learning is different to a didactic approach, where an educator often provides 'one-size fits all' information, in a one-way direction to a passive recipient.

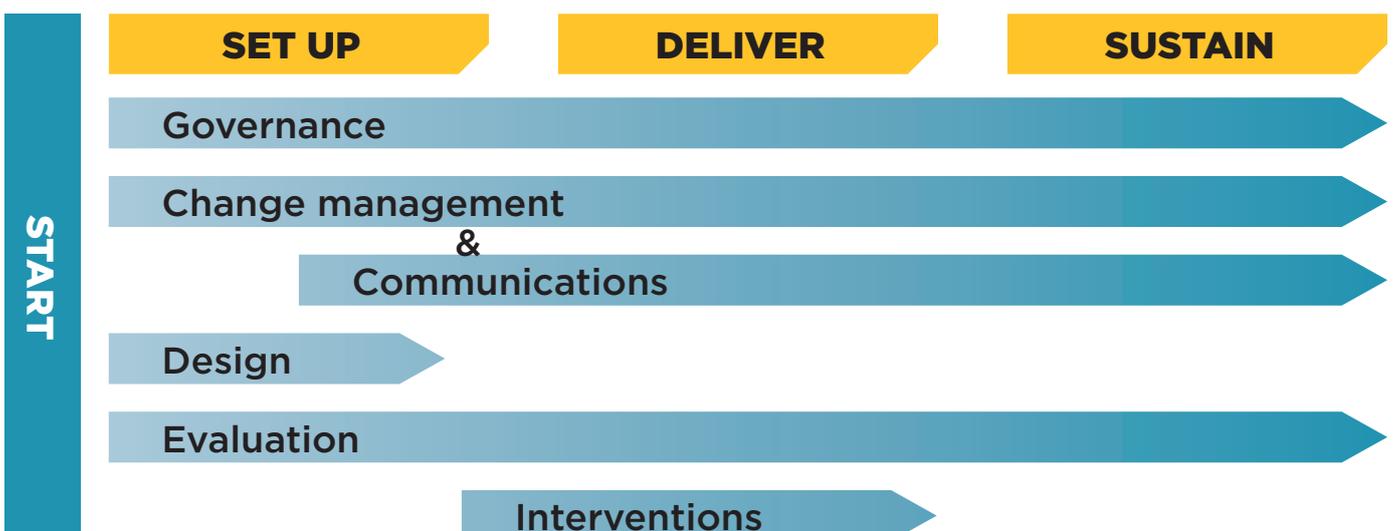
When to use the toolkit's chapters?

This toolkit recommends dividing your Choosing Wisely project into 3 stages:

- Set up (pre-implementation)
- Deliver (implementation)
- Sustain (post-implementation).

There are 2 types of sustainability:

- Sustaining the objectives of your Choosing Wisely project's specific clinical problem (eg reducing unnecessary radiology for acute injuries in emergency or unnecessary pathology studies etc.).
- Sustaining Choosing Wisely initiative in general after your project's funding has run out. This will enable your health service to address additional clinical problems.



Beginner

If you're implementing a Choosing Wisely project for the first time, start with the following chapters:

- 📌 Governance
- 📌 Change management + Communications
- 📌 Design.

Then use the following chapters in this order:

- 📌 Evaluation
- 📌 Interventions.

Experienced

If you've already implemented a Choosing Wisely project or projects, the modular learning style enables you to use chapters according to the needs of your project.

In general, it's advisable to start where your project has the:

- 📌 greatest need
- 📌 least knowledge, skills and experience.



**Choosing Wisely
Australia**

An initiative of NPS MedicineWise

INNOVATION FUND PROJECT



**BETTER
CARE
VICTORIA**

Choosing Wisely
Implementation Toolkit
Governance

 **NPS
MEDICINEWISE**



CONTENTS

Governance

St Vincent's Hospital Melbourne - What they did

What is governance?

Why is governance important?

When to establish governance?

What to do

Set up

Individuals

Groups

Deliver

Sustain

Western Health - What they did

Tools and Resources

Templates

Example

Further information

References

GOVERNANCE

St Vincent's Hospital Melbourne – What they did



One of the first things implemented by the St Vincent's Hospital Melbourne Choosing Wisely Collaborative Project was adopting the hospital's existing governance structure for large improvement projects requiring executive sponsorship.

Clare Hammer, continuous improvement coach at St Vincent's Hospital Melbourne, says they knew decisions needed to be made from the start about who needed to be involved and what their responsibilities were to avoid pitfalls and maximise success.

Two key governance structures set up for the project, whose aims included reducing unnecessary tests such as routine chest x-rays and clinical monitoring of 'ward-ready' patients in the department of critical care medicine (DCCM), were the project working group and steering committee.

The project working group, "which included clinicians and managers working at the coalface, met regularly to discuss the finer details of the project and make the decisions that would affect frontline staff," says Ms Hammer.

"Meeting frequently helped to foster collaboration between the members of the group, which has been important for achieving successful outcomes," she says.

Executive huddles

A more informal approach was adopted by the project's steering committee, which included the project working group, general managers and executive, compared to a traditional steering committee at St Vincent's Hospital Melbourne.

"The aim of being more informal was to encourage greater collaboration, similar to the project working group, and enable participants to feel comfortable to ask questions and make contributions to the project," says Ms Hammer.

"This model also supported the clinicians to own and lead the changes they were working on," she says.

As a result, the steering committee monthly meetings were called 'executive huddles', with everyone attending standing gathered around the project board displayed in the intensive care unit (ICU) handover room.

"The invitation list was broad, and not only management, to ensure greater engagement across the hospital. Anyone with an interest in the project was invited and/or encouraged to attend, including those affected by the changes upstream and downstream," says Ms Hammer.

"For example, we invited the emergency department director, as one of the potential benefits of reducing the number of routine chest x-rays ordered by the DCCM would be to give them greater access to the mobile radiographer in the morning between 5 and 7," she says.

What is governance?

Governance is a means of providing project oversight in line with the existing organisational governance models. It involves relationships, responsibilities and processes that come together to ensure a project is monitored and undertaken within an established structure.

In simple terms, this means 'Who does what'.

'Who' includes:¹

- 👤 executive/management
- 👤 workforce - clinical, medical records administration, data analysts and more
- 👤 patients and consumers.

'What' involves the:

- 👤 relationships and interactions between the individual people and groups participating in your project, who each have a specific set of responsibilities.

Governance may sound overwhelming or over-engineered. But being clear about who will do what at various levels and points of your project means the right hand will know what the left hand is doing.

Why is governance important?

Good governance ensures you involve the right people at the right time to make your project as successful as possible.

Once the right people have been identified, it ensures that everyone involved is clear about 'who does what' to avoid negative impacts and ensure positive impacts.

Negative impacts include: miscommunication, doubling up on work, conflict between project members, and poor design and implementation of interventions - and ultimately, less than optimal success for your project and, in the worst-case scenario, greater harm to your patients.

Positive impacts are based around achieving key principles including:²

- 👤 transparency
 - ▶ The roles and responsibilities of each person or group involved in the project are clearly defined, agreed to and documented.
 - ▶ Decisions are documented, and minutes and reports of decisions are circulated among team members and stakeholders involved in delivery.

🟡 accountability

- ▶ There is a shared understanding of where the overall responsibility lies, with defined reporting and review arrangements.

🟡 efficiency

- ▶ Processes are designed with efficiency in mind – processes that require duplication of effort are minimised and there is a focus on achieving results.

🟡 responsiveness

- ▶ Arrangements facilitate fast and proactive management and escalation of issues, risks and disputes to the right person or body for resolution.
- ▶ Arrangements are reviewed regularly and can be adapted as the project moves through the three stages: set up, deliver and sustain.

🟡 leadership

- ▶ Executives, managers and leads agree on a clear outcome for the project and demonstrate a shared commitment to the governance arrangements.

When to establish governance?



- 🟡 Establishing a governance structure for your project begins at the start of the set up stage.
- 🟡 Governance arrangements then continue during the remainder of the set up stage, and throughout the deliver and sustain stages.

What to do

Set up

The good news is you usually don't have to re-invent the wheel for your project.

It's expected that there are already existing governance requirements for quality improvement in your health service. But if there aren't, governance is a straightforward process that can be managed using the content in this toolkit.

Your governing body ensures that there is a level of hierarchy for:

- 👉 authority for decision making
- 👉 responsibility for the delivery of the project
- 👉 risk mitigation.

It is critical to identify the right stakeholders for effective project governance. The choice of positions/roles will depend on the requirements of your project (i.e not every project needs the same positions/roles). The following sections are examples of who can be involved in the governance of your project.

Individuals

The following are positions/roles and their responsibilities that may be used for Choosing Wisely projects.

Individual positions / roles	Responsibilities
Project officer / lead / manager / coordinator	<p>Person from the quality improvement unit or employed especially for the project.</p> <p>Responsible for delivering the project on time, within budget and to quality, together with the Clinical / Medical Lead, and ensuring risk is managed and issues are resolved.</p>
Clinical / Medical lead	<p>Person, usually a doctor, nurse or allied health professional who is a subject matter expert.</p> <p>Responsible for delivering the project in line with clinical practice standards in conjunction with the Project officer / lead / manager / coordinator.</p> <p>Responsible for providing feedback on proposed solutions in areas of expertise to support the Project officer in delivering project outcomes.</p>
Champion/s	<p>Person, usually a doctor, nurse or allied health professional who is important to engage so that they can promote and explain the project and set a positive example for colleagues to successfully deliver the project and sustain changes that have been achieved. There can be more than one champion for a project.</p>
Owner	<p>Usually the manager of the Clinical / Medical lead such as Nurse unit manager (NUM) or Clinical team leader.</p> <p>Responsible for providing strategic input, supporting Clinical / Medical lead and the Clinical team.</p>

Individual positions / roles	Responsibilities
Sponsor	<p>Usually one management level up from the Owner.</p> <p>Key link between the executive and project to ensure support and advocacy, as well as alignment with organisational priorities.</p> <p>Responsible for primary organisational accountability for ensuring that the project is signed off and delivered.</p>
Consumer/patient representative	<p>Responsible for providing valuable perspectives for health services to consider when delivering care or changing how care is delivered.</p> <p>Helps the health service to incorporate consumer and community input into operations and planning.</p> <p>Helps test feedback on processes that can help improve clinical care quality.</p> <p>Responsible for providing a lived-experience of the health services to help drive quality of care.</p>

Groups

The following are groups and their members, and their responsibilities that may be used for Choosing Wisely projects.

Groups	Members	Responsibilities
Project working group / team	<p>Owner</p> <p>Clinical / Medical lead</p> <p>Project officer / lead / manager / coordinator</p>	<p>Manages day to day tasks and decisions.</p> <p>Develops and ensures implementation of project interventions and activities.</p> <p>Develops and ensures implementation of project evaluation.</p> <p>Identifies and escalates risk to the Steering committee.</p>
Clinical / advisory team	<p>Hospital unit(s) representatives</p> <p>Quality improvement representative</p> <p>Consumer/patient representative</p> <p>Subject matter expert</p>	<p>Has responsibility for delivering / embedding the project outcome.</p> <p>Provides clinical governance for the implementation of the project.</p> <p>Highlights and monitors clinical risks.</p> <p>Develops methods and materials for interventions and activities.</p> <p>Delivers project on time and in scope.</p> <p>Monitors project evaluation.</p> <p>Plans and develops further Choosing Wisely projects.</p>

Groups	Members	Responsibilities
Team	<p>All staff with an involvement in or connection to the project including:</p> <ul style="list-style-type: none"> ▶ clinical ▶ support ▶ consumer/patient. 	<p>Provides different points of view into the problem and the solutions beyond the project working group.</p> <p>Provides specialist input as required.</p>
Steering committee	<p>Executive representative (eg Sponsor)</p> <p>Sponsor</p> <p>Divisional/ specialty unit representative (eg ambulatory care/surgical unit)</p> <p>Clinical group representative (eg nurse practitioner)</p> <p>Medical administration representative</p> <p>Quality improvement representative</p> <p>Consumer/patient representative</p>	<p>Provides overall project governance and monitoring during set up and delivery stages.</p> <p>Makes decisions and provides accountability for those decisions.</p> <p>Identifies barriers and enablers.</p> <p>Delivers of project on time and in scope.</p> <p>Manages relationship between the hospital/health service.</p> <p>Plans and develops further Choosing Wisely projects.</p>
Quality improvement committee	<p>Executive representative</p> <p>Divisional/ specialty unit representative (eg ambulatory care/surgical unit)</p> <p>Clinical group representative (eg nurse practitioner)</p> <p>Medical administration representative</p> <p>Quality improvement representative</p> <p>Consumer/patient representative</p>	<p>Provides overall project governance and monitoring during sustain stage, as part of remit to oversee key areas including quality improvement, safety and timely care.</p>
Consumer advisory committee	<p>Consumer representatives</p> <p>Hospital representative</p> <p>Project representative</p>	<p>Enables extensive consumer input, feedback and communication across the health services and project committees.</p> <p>Helps health services to appropriately incorporate feedback from patients and communities into projects.</p> <p>Helps to identify future Choosing Wisely initiatives for implementation.</p>

The diagram below is an example of a potential governance structure you can use within your health service.



Tip

Planning for governance sustainability

Keep in mind that people in positions/roles and groups may leave your health service. So it may be prudent during the set up stage to build in redundancy. For example, having multiple representatives for a designated position/role (eg two pharmacists) sit on the steering committee in case of staff turnover or if someone misses a meeting.

Deliver

The positions/roles and groups established at the start of the set up stage usually stay consistent through to the end of the deliver stage.

However, at the same time, the members of the groups may change to more appropriately suit the project's needs during the deliver stage. For example, data experts in the hospital may be required during the set up stage to establish infrastructure, however may no longer be needed during the deliver stage.

Sustain

For sustaining the objectives of your project's specific clinical problem, some positions/roles may not need to continue on, such as a project officer. However, others such as the clinical lead may have an ongoing responsibility to monitor any positive outcomes of your project and help ensure they aren't reversed. A group, such as your project's steering committee, may also still be needed to continue governance.

To sustain the Choosing Wisely initiative in general after your project's funding has run out and enable your health service to address additional clinical problems, some positions/roles and groups will need to continue on, such as the sponsor and steering committee. These roles are important as they have responsibility and ownership of the initiative at your organisation.

Options to support sustainability can be to integrate the work into an existing committee in your health service, such as committees sitting under the quality improvement unit. This group will need to be responsible for ongoing oversight on what happens with any positive outcomes achieved and making proposals for additional work to tackle a clinical problem. Also, lessons learned about governance from your Choosing Wisely project, may be passed on and utilised by subsequent projects.

Western Health – What they did



The best available people in the right positions is essential for successful governance, says Eleanor Garnys, innovations and improvement partner at Western Health and project officer for the Western Health Choosing Wisely Project.

“We were lucky, for example, that our chief medical officer, Dr Paul Eleftheriou, who had previous experience with another Choosing Wisely project at Austin Health, could be appointed as chair of our steering committee and also executive sponsor,” she says.

“Dr Eleftheriou understood many of the barriers and challenges, and how to help overcome them during the project. Our aim was to improve medical imaging requesting information and justification across all hospital units and thus support Choosing Wisely Australia recommendations. Dr Eleftheriou helped the steering committee members develop useful advice that was provided to the project’s clinical working group.”

Certainly while it’s recommended for Choosing Wisely projects to follow their health service’s existing governance requirements, there can be times when a project will need to make decisions on its own about positions, structures and responsibilities.

“One major decision we’re facing is whether the steering committee will continue oversight during the sustain stage or should our health service Right Care Committee, a domain committee supporting best care at Western Health should take on the further advancement of Choosing Wisely at Western Health,” says Ms Garnys.

“The core aim of the Right Care Committee is to ensure the provision of appropriate, equitable and effective care for each person. This overarching philosophy of right care aligns with the ideology of the Choosing Wisely movement,” she says.

“Our decision will most likely depend on how successful the outcomes are after we complete our evaluation. If the outcomes are less successful, we may need the steering committee to continue to provide its expertise, while a more successful outcome may allow the Right Care Committee to take its place.”

Tools and Resources

Templates

- 👉 [Better Care Victoria Organisational Readiness Assessment Template](#)
You can use this template to assess whether your health service is ready to implement Choosing Wisely initiatives, particularly section 2. Policy and Process, for governance
- 👉 [Steering committee terms of reference](#)
Developed by Austin Health.

Example

- 👉 [Steering committee and Clinical working group](#)
Developed by Western Health

Further information

[Governance for Safety and Quality in Health Service Organisations Standard 1](#) – Australian Commission on Safety and Quality in Healthcare (ACSQHC)

[General practice management toolkit; Clinical governance – Module 12](#) – Royal Australian College of General Practitioners (RACGP)

References

1. Australian Commission on Safety and Quality in Health Care. National Model Clinical Governance Framework. Sydney: ACSQHC, 2017. <https://www.safetyandquality.gov.au/wp-content/uploads/2017/11/National-Model-Clinical-Governance-Framework.pdf> (accessed 18 January 2019).
2. Department of the Prime Minister and Cabinet. 2 Governance. Cabinet Implementation Unit Toolkit. Canberra: Australian Government, 2013. <https://www.pmc.gov.au/sites/default/files/files/pmc/implementation-toolkit-2-governance.pdf> (accessed 18 January 2019).



**Choosing Wisely
Australia**

An initiative of NPS MedicineWise

INNOVATION FUND PROJECT



**BETTER
CARE
VICTORIA**

Choosing Wisely
Implementation Toolkit
**Change management
& communications**



**NPS
MEDICINEWISE**



CONTENTS

Change management & communications

Western Health - What they did

What is change management?

Models of change management

Why is change management important?

What is communications?

Why is communications important?

When to do change management & communications?

What to do

Set up

Deliver

Sustain

Swan Hill District Health - What they did

Tools and Resources

Templates

Guidance

Examples

Further information

References

CHANGE MANAGEMENT & COMMUNICATIONS

Western Health – What they did



Enabling buy-in and taking ownership of healthcare change have been key features of the Western Health Choosing Wisely Project, says Eleanor Garnys, innovations and improvement partner at Western Health and Choosing Wisely project officer.

“Rather than myself as the Choosing Wisely project officer coming from the outside telling clinicians what to do, clinicians made the decisions and then implemented them,” says Ms Garnys.

A standout example was how the recommendations for diagnostic testing for pulmonary embolism were adopted by the project.

The doctors in the respiratory medicine unit were the ones who got together and decided that the current Victorian state evidence-based practice recommendations were best practice and should be implemented across Western Health.

“Because the respiratory medicine unit’s practice met the Choosing Wisely principle of reducing low value care, we agreed that our project would aim to implement it, not just in the unit but across all the hospital,” says Ms Garnys.

“And we’ve found the doctors in the hospital have been completely on board with participating, promoting and implementing it as part of the project,” she says.

What is change management?

Your Choosing Wisely project aims to reduce unnecessary treatments and improve the quality of healthcare in your health service.

Each stakeholder can feel and respond differently about the change, where:

- 👉 some may embrace it and even become Champions for your project
- 👉 others can find it challenging – with responses ranging from feeling anxiety, through to active non-compliance.

Change management aims to:

- 👉 understand the feelings, attitudes and behaviours of stakeholders
- 👉 build relationships with and between stakeholders
- 👉 support stakeholders throughout the change.

Developing a change management and communications approach may feel like an unnecessary or cumbersome step. But having an approach to getting people on board with your project will help in the long run.

See ‘Why is change management important?’ and ‘Why is communications important?’ below for more details.

Stakeholder

A stakeholder is defined as “any person, group or institution with interests in a project...who may be directly or indirectly affected by the process or the outcome.”¹

This may include people in the following categories:

- 👉 clinical staff
- 👉 management/executive
- 👉 support/administrative staff
- 👉 consumers/patients.



Change management & communications and Governance

Change management & communications and Governance are two separate chapters, but there is a significant overlap and differences between these two areas.

What they share in common are the roles / positions and groups already recommended for the governance of your project, that may also be recommended for change management.

For example, a steering committee is commonly considered a requirement for both governance and change management. One of the responsibilities for a steering committee is to identify barriers and enablers. Change management also identifies barriers and enablers, but in addition, makes a plan to address them.

However, governance involves people who are there to support the project's completion but some of them may actually not be actively involved with the change the project is trying to achieve.

So change management is about generating buy-in across the whole health service and governance is about oversight across the project itself.

Models of change management

Different change management models can be applied to healthcare. Two core approaches are: planned change and emergent change.²

Healthcare change tends to be based on the planned change approach. It views change as a transitional process between fixed states following pre-planned steps that aim to relinquish old behaviours and adopt new behaviours.

The emergent change approach views change as less prescriptive and more 'bottom up', where managers cede some of the decision-making authority to employees and act as facilitators of change, as opposed to controllers of change.²

Why is change management important?

- Q.** Do you have a person who can promote and explain the project, and set a positive example for colleagues to successfully deliver the project?
If yes, that person can be supported to enable them to be designated in a Champion position, as described in your governance set up.
- Q.** Do you have a person who is negative towards your project, has influence among other stakeholders and the power to reduce compliance?
If yes, that person requires your project's engagement such as face to face meetings and providing information from as early as possible to understand their concerns early on and bring them on board.

Change management can improve the chances of your project being a success. It's been estimated and often quoted that 70% of change initiatives in all sectors fail.^{3,4}

The main reasons cited are that:³

- 🟡 change plans do not include those affected early enough in the planning
- 🟡 change plans do not consider human factors i.e., motivations and human behaviours
- 🟡 individual barriers to change are not directly addressed
- 🟡 sustainability is not built in from the beginning.

However, it may be inappropriate to consider this 70% figure as an “inherent” fail rate that every project needs to overcome because the context of each project is different.⁴

For instance, it's reasonable to assume that Choosing Wisely projects may be more likely to have a higher success rate because they involve healthcare professional-driven change.

Nevertheless, it's important to take into account the above potential reasons for failure. Being able to do this allows your Choosing Wisely project to more easily deliver its aim.

What is communications?

Communications is an integral part of change management. You can think about change management as framing the buy-in you want to achieve and communications as actually making the change happen.

It involves providing consistent and relevant information about the change that is being planned and implemented for:

- 🟡 stakeholders; involved in and affected by your project
- 🟡 people in the whole health service; not affected by your project.

It can involve:

- 🟡 formal channels to connect with your stakeholders, including: health service intranet, grand rounds, posters, lanyards and more
- 🟡 informal means such as the project Champion speaking to colleagues during the day and setting up networking events.

Why is communications important?

Communications is important because it:

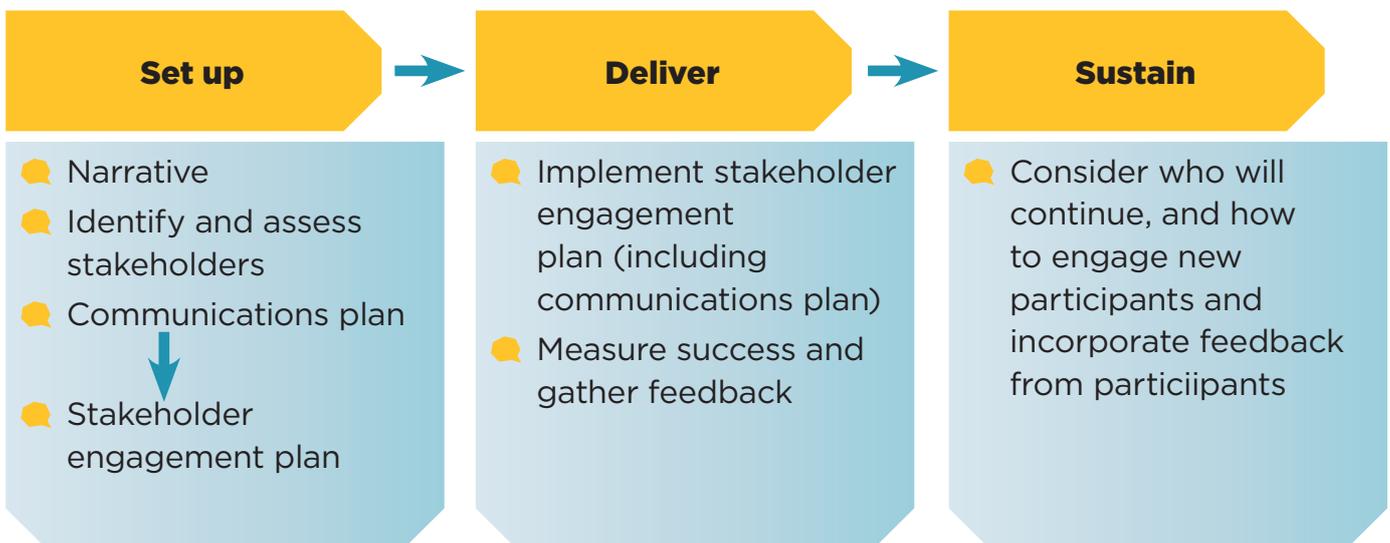
- 🟡 enables stakeholders to make the best possible contribution for your project's success
- 🟡 ensures transparency, trust and confidence
- 🟡 lays the foundation for scaling up future Choosing Wisely projects in other parts of your health service.

When to do change management & communications?



- 🟡 It's recommended that planning change management for your project begin at the start of the set up stage.
- 🟡 Change management then continues during the remainder of the set up stage, and throughout the deliver and sustain stages.
- 🟡 Communications begins after change management starts, during the set up stage.
- 🟡 Communications continues throughout the deliver and sustain stages.

What to do



Set up

Narrative

To effectively implement change you need a positive culture and the ability to create a compelling narrative. A captivating narrative should capture why Choosing Wisely is important to the audience. While implementing your chosen topic areas, remember to frame your narrative based on your audience. For example, the narrative or story you tell to executives will likely be different to the story shared with ward-based nurses.

When attempting to engage staff, focus on:

- why the project is important to the audience
- what the interests of the audience are
- how the project will impact and benefit the audience
- how to motivate the audience to spread the word to others.

Do not underestimate the importance of a compelling narrative on successful and sustainable implementation. Consumer stories are often an effective way to engage clinical staff and focus on a common purpose.



Read the following:

- Office of the Commissioner for Public Sector Employment, South Australia Change Management Toolkit [Developing your case for change](#)

Identify and assess stakeholders

Find out who are the people involved in and affected by your project, both as individuals and the group they belong to, and categorise them in terms of their:

- 👉 position / role in the project
- 👉 experience with change and impact on current readiness for change
- 👉 promotion and support that they'll provide and influence they'll have
- 👉 detraction and non-compliance that they'll provide and influence they'll have.

Once stakeholders are identified, the next step is to assess how to engage with them. This particularly involves categorising them according to the:

- 👉 type of engagement they are best suited to: inform, consult, involve, collaborate, empower
- 👉 key messages.



Read the following:

- 👉 Office of the Commissioner for Public Sector Employment, South Australia Change Management Toolkit [*Identifying stakeholder types*](#)
- 👉 [*Choosing Wisely Collaboration Implementation Toolkit Workshop 2*](#)
Levels of stakeholder engagement - Page 5
How to engage your stakeholders - Page 6

Communications plan

The communications plan is based on your project's narrative. It requires:

- 👉 being clear on which communication channels are suited for the type of engagement that you've already identified for each stakeholder (inform, consult, involve, collaborate, empower)
- 👉 categorising stakeholders into audience groups
- 👉 developing a schedule (timelines) for communications
- 👉 identifying and planning for any risks.



Read the following:

- 👉 [*Choosing Wisely Collaboration Implementation Toolkit Workshop 2*](#)
How to engage your stakeholder - Pages 6 to 8
- 👉 Office of the Commissioner for Public Sector Employment, South Australia Change Management Toolkit [*Communications plan*](#)
- 👉 [*Choosing Wisely Communications Plan*](#) developed by Western Health

Stakeholder engagement plan

Bring all of the above components into a single plan.

This includes a schedule (timeline), or at least the frequency of how often each part of the plan is done.



Read the following:

- 📌 [*Choosing Wisely Collaboration Implementation Toolkit Workshop 2*](#)
Bringing it all together – Stakeholder engagement plan – Page 9

Deliver

- 📌 Implement the Stakeholder engagement plan, including the Communications plan, according to the schedule.
- 📌 Measure success and gather feedback.
- 📌 Make any changes required for the plans based on measures and feedback.

Sustain

Change management and particularly communications can be continued through the sustain stage.

Consider the following:

- 📌 Who needs to be involved to continue to champion the initiative or project.
- 📌 Keep staff engaged – create opportunities for staff to share their experiences of the project through staff presentations or newsletter.
- 📌 Incorporate both staff and consumer feedback on the interventions.

Swan Hill District Health – What they did



One aspect of stakeholder engagement that worked well for the Swan Hill District Health *Using Clinical Decision Rules (CDR) for diagnosis of pulmonary embolism* project was having champions for behaviour change.

“Most people, particularly the nurses have been great supporters of the project’s aim to reduce unnecessary CT pulmonary angiography and have actively put in place the change to the way we diagnose pulmonary embolism,” says Sharryn Mathieson, Choosing Wisely

Coordinator at Swan Hill District Health.

But another aspect, in hindsight, didn’t work out so well.

Managing resistance

“We had a few doctors who either didn’t participate in education sessions about the CDR or were actively against it,” says Ms Mathieson.

“We’ve had to be flexible and adapt to these challenges. We followed up with the doctors and provided them with additional individual education sessions to ensure that all clinical staff knew about the clinical problem and solution,” she says.

“We also held further sessions with the nurses so that when a patient presents with symptoms and there is a query about the diagnosis of pulmonary embolism, to work out with them how to ensure the CDR is available for all doctors to use when they are deciding which tests to order when diagnosing pulmonary embolism.”

Clearly the project managed the resistance well as it arose. But in hindsight it could have been done better with planning for it ahead of time, which would have saved them having to scramble together their responses.

Tools and Resources

Templates

📌 [Better Care Victoria Organisational Readiness Assessment Template](#)

You can use this template to assess whether your health service is ready to implement Choosing Wisely initiatives, particularly section 1. People, for change management

📌 [Barriers and Facilitators Assessment](#)

📌 [Stakeholder engagement plan](#)

Choosing Wisely Collaboration Implementation Toolkit Workshop 2 - Bringing it all together - Stakeholder engagement plan - Page 9

📌 [Communications plan](#)

Guidance

📌 [Twitter cheat sheet](#)

📌 [Daily Operating Systems administration guide](#)

A method of working to help a health service answer the fundamental question 'Are we ready today - if not, why not?' Developed by Better Care Victoria.

Examples

📌 [Choosing Wisely Communications Plan](#) developed by Western Health

📌 [Choosing Wisely A4 leaflet](#) developed by Goulburn Valley Health

Further information

- 📌 [Change management, Quality improvement primer](#), developed by Health Quality Ontario, 2013
- 📌 [Change management in healthcare](#), Antwi M and Kale M, 2014 Monieson Centre for Business Research in Healthcare, Queen's University, Kingston, Ontario
- 📌 [Change management toolkit](#) developed by Office of the Commissioner for Public Sector Employment, Government of South Australia, 2019

References

1. World Health Organisation. Health Service Planning and Policy-Making: A toolkit for nurses and midwives. Geneva: World Health Organisation, 2005. http://www.wpro.who.int/publications/docs/Health_service_planning.pdf?ua=1 (accessed 23 January 2019).
2. Antwi M, Kale M. Change management in healthcare. Kingston, Ontario: The Monieson Centre for Business Research in Healthcare, 2014. https://smith.queensu.ca/centres/monieson/knowledge_articles/files/Change%20Management%20in%20Healthcare%20-%20Lit%20Review%20-%20AP%20FINAL.pdf (accessed 23 January 2019).
3. Health Quality Ontario. Change management. Quality improvement primers. Toronto: Health Quality Ontario, 2013. <http://www.hqontario.ca/Portals/0/Documents/qi/qi-change-management-primer-en.pdf> (accessed 23 January 2019).
4. Hughes M. Do 70 Per Cent of All Organizational Change Initiatives Really Fail? AU - Hughes, Mark. Journal of Change Management 2011;11:451-64. <https://doi.org/10.1080/14697017.2011.630506>.



**Choosing Wisely
Australia**

An initiative of NPS MedicineWise

INNOVATION FUND PROJECT



Choosing Wisely
Implementation Toolkit
Design





CONTENTS

Design

Ballarat Health Services – What they did

What is design?

Why is design important?

Choose the right clinical problem

Royal Children’s Hospital – What they did

Identify the causes of the clinical problem

When to design?

What to do

Understand the clinical problem

Using data to test the clinical problem

Define the clinical problem

St Vincent’s Hospital Melbourne – What they did

Tools and Resources

Templates

Examples

Further information

References

DESIGN

Ballarat Health Services – What they did



Hannah Ryan-West was the Choosing Wisely project officer at Ballarat Health Services. She was confident that there were two main causes of the unnecessary testing of venous blood gases (VBG) in the Emergency Department (ED) that had been identified as the project's clinical problem.

In addition to being project officer, she was still a clinical nurse specialist in the ED and knew the ins and outs of the daily work.

However, she also knew that she was just one person and couldn't rely on confidence alone. A process needed to be put in place to confirm the causes.

The project working group decided that the best method was for Ms Ryan-West to conduct face-to-face interviews with the medical and nursing staff in the ED. She interviewed around 50 nurses and 20 doctors, which was 50% of the staff.

And indeed the interviews confirmed what she had thought - that there were two main causes for the unnecessary testing; 1) a systems-based cause and 2) lack of information.

The systems-based cause was "the ease of accessibility to the blood gas machine and the syringes. The blood gas machine was in our ED, so it was so simple and quick to get results and the syringes were in every IV [intravenous] trolley. There was no incentive to not do one," says Ms Ryan-West.

"The other cause was that no guidelines existed on which patient groups were appropriate to have a VBG sample taken and run," she says.

What is design?

Design is the creation of a plan for the implementation of interventions. It involves using data and feedback from people to develop an accurate and full understanding of the clinical problem that your Choosing Wisely project is tackling.

This is done over three stages:

- 👉 Choose the right clinical problem.
- 👉 Identify the causes of the clinical problem that you've chosen.
- 👉 Develop an approach to which interventions will be implemented and measured for impact.

Clinical problem

Clinical problem is defined throughout this toolkit as the test or treatment that's being performed unnecessarily in your health service.



Design and Evaluation

Design and Evaluation are two separate chapters, but they overlap significantly.

They both use methods to measure and analyse. The main difference is that:

- 👉 Design only occurs during the set up stage of a project. Its purpose is to help plan and determine which interventions (eg education, audit feedback etc.) will be implemented.
- 👉 Evaluation occurs in all three stages of a project; set up, deliver and sustain. It has two key purposes, which are to:
 1. assist with the Design to identify the causes of the clinical problem to help determine which interventions (eg education, audit feedback etc.) will be implemented
 2. assess the progress and success of a project.

Why is design important?

Choose the right clinical problem

Your health service may have already chosen a clinical problem for your Choosing Wisely project – or you're still looking for a clinical problem to tackle.

Either way, it's essential to firstly confirm that the clinical problem is the right one for your health service.

The clinical problem may seem obvious to you at the start, but it is important to confirm you're on the right track - or whether, in fact, another clinical problem is better suited for your project.

Making the decision involves gathering a mix of quantitative and qualitative information that answers questions including:

- Q.** Is the clinical problem supported by the evidence?
If it is a Choosing Wisely Australia recommendation, it is already regarded as evidence-based. However your health service can review the evidence again.
- Q.** Is the timing right?
For example, a project for bronchiolitis in children should ideally be designed in a way that allows the implementation of interventions to be delivered in winter when the condition is at its peak effect.
- Q.** Does this clinical problem align with strategic objectives?
Particularly, will the sponsor or steering committee champion the clinical problem?
- Q.** Does the data demonstrate that this area is actually a problem?
For example, can the clinical problem be adequately measured for baseline and outcomes data.
- Q.** Is the clinical problem large enough to be fixed?
It may be a problem, but if data shows that the difference between current and ideal performance outcomes is small, then showing an impact may be too difficult.
- Q.** Which units are affected by the clinical problem?
Does it affect multiple units such as pathology and general medicine? Or just one unit such as the Emergency Department (ED)? This can help you decide the size of your project.
- Q.** Which clinicians does the clinical problem affect?
For example, is it only nurses? Or both doctors and nurses? This will help you identify the clinicians that are impacted by and can change the problem.

Royal Children's Hospital – What they did



When the Royal Children's Hospital (RCH) transitioned from a mainly paper-based to a fully electronic medical record (EMR) in 2016, their ability to design quality improvement projects such as its Choosing Wisely Campaign, was dramatically transformed.

The RCH Choosing Wisely Campaign had initially decided to address clinical problems based on the five recommendations made by the Royal Australasian College of Physicians (RACP) Paediatrics & Child Health Division.

"The EMR enabled us to pull large data sets incredibly efficiently," says Dr Joanna Lawrence, consultant paediatrician and medical lead for the Choosing Wisely Campaign at Royal Children's Hospital.

"We were able to rapidly interrogate our practice... and found that we weren't performing too badly against 3 of the 5 recommendations," says Dr Lawrence.

The project could then choose the clinical problems it should focus on.

"We chose to target bronchiolitis, as this was both a recommendation from the college but is also the commonest reason for hospital admission in infants...so we see a lot of it," says Dr Lawrence.

"We found that we were ordering chest x-rays at a rate of 11 to 12%, when international benchmarks suggested we could reduce this to 4%. As a consequence of over-ordering chest x-rays, we were also prescribing oral antibiotics more frequently, which is not good for patients and not good for antibiotic stewardship," she says.

"Finally we were ordering salbutamol [Ventolin] at a rate of 9% despite guidelines recommending against the use of Ventolin in bronchiolitis."

Identify the causes of the clinical problem

Identifying causes is like finding the key that opens the door to what's actually going on with the clinical problem you have chosen.

In healthcare we can fall foul to the assumption that people and people-driven systems are always rational and predictable.

We often expect that education and training packages will provide the solution.

However there are many different potential causes of a clinical problem. In general terms, they may be described as skills, attitudes, habits, culture, structure, availability of resources, as well as awareness and knowledge.¹

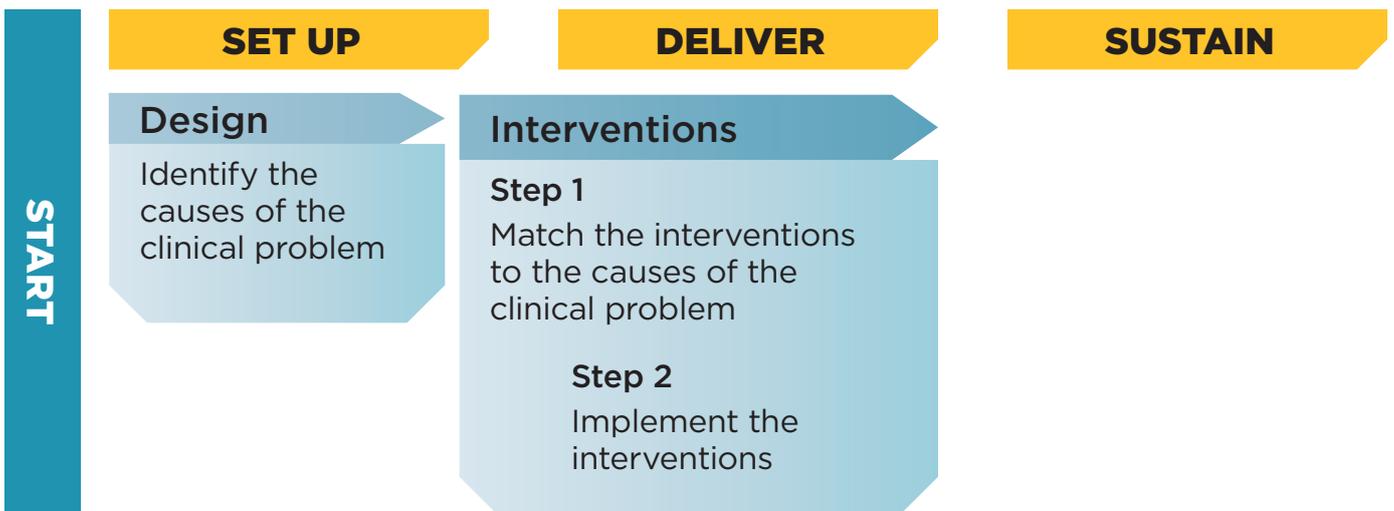
As a result, it's important not to confuse the clinical problem (what outcome are we trying to achieve?) with the behavioural factors (why is the behaviour that causes the clinical problem happening?).

Analysing behavioural factors:

- 🟡 focuses on the various people and structures involved and the role they have in reinforcing the status quo
- 🟡 considers a problem from a range of perspectives to better understand why it occurs
- 🟡 enables you to understand the broader environment in which this problem exists — what will help you, what will hinder you
- 🟡 finds things you can leverage or take advantage of, such as previous programs/campaigns or potential partnerships
- 🟡 scopes people’s beliefs, skills, assumptions and the emotional and attitudinal drivers that influence what they do (or don’t do).

What happens once you find the key that opens the door?

The ultimate aim is to help you match interventions to the causes you have identified.



For example, if lack of knowledge isn’t the cause of the clinical problem, rather some clinicians are fearful of missing a diagnosis, then this fear needs to be addressed for your project to be a success.

Matching interventions to causes is explained in the Interventions chapter.

When to design?

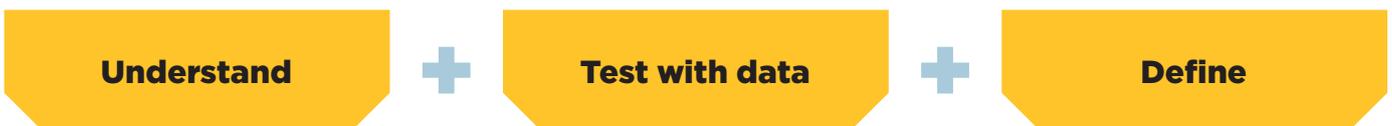


- 🟡 It’s recommended that design begins at the start of the set up stage and concludes before the set up stage finishes.

What to do

The recommendations on what to do for the design of your Choosing Wisely project apply to all three stages:

- 🟡 Choose the right clinical problem
- 🟡 Identify the causes of the clinical problem that you've chosen
- 🟡 Develop an approach to which interventions will be implemented and measured for impact.



These recommendations are based on three key areas for the clinical problem:

Understand the clinical problem

Unfortunately there's no single way to break down a problem and examine its constituent parts. This is due to the dizzying number of factors including; mechanisms, people and processes involved in health care.

However, there are behaviour change models that describe elements such as individual motivation, organisational structures, quality drivers, behavioural barriers and more.

Here are 4 validated models recommended to help better understand the possible causes of the clinical problem:

1. Systems; Ferlie and Shortell quality improvement framework.²
2. Behavioural drivers; Michie theoretical domains framework.^{3,4}
3. Motivation; Proschaska and Diclemente transtheoretical model.⁵
4. Pre-requisites to implementation; Glasziou evidence to practice pipeline.⁶



Read the following:

- 🟡 [Choosing Wisely Collaboration Implementation Toolkit Workshop 1](#)

Four important perspectives – Pages 9–17

Using data to test the clinical problem

Once you have an understanding of the clinical problem, the next step is to gather information that is divided into two categories:

1. Qualitative; such as a survey asking why and when a test or treatment is being performed.
2. Quantitative; such as a data extract that shows how often a test or treatment is being performed.

More often than not, a mixed methods approach that uses both qualitative and quantitative methods is best.⁷

The population being evaluated can include:

- 👤 clinicians; individual, team, unit (department), hospital or health service
- 👤 patients/consumers.

Keep in mind that we usually come at a clinical problem with confidence and assumptions that we know what's going on, and it is important to test them with a range of different roles and personalities in your health service.

This can be done in very formal and structured ways or in less formal ways, depending on the time that you and other people have available for the project.

Qualitative

Qualitative information usually explores experiences, behaviour, perceptions, thoughts and feelings through gathering non-numerical, textual data about individuals and groups of people you are trying to influence.⁷ The recommended methods for gathering qualitative information include surveys, interviews and observation.

Quantitative

Quantitative information explores patterns, trends and impacts through gathering numerical data. It is usually made up of data extracts from the health service medical records and test ordering systems.

Define the clinical problem

This involves making a clear statement about:

- 👤 what is the clinical problem
- 👤 what are its causes
- 👤 what is the proposed change to the clinical problem that is your project's aim.

The proposed change can be stated both as qualitative and quantitative goals, such as a percentage reduction of the test being ordered or percentage increase of prescribing a treatment according to guidelines.

With the clinical problem defined, you can plan your interventions to address it and design an evaluation approach to measure the impact of your interventions.

St Vincent's Hospital Melbourne – What they did



One of the clinical problems tackled by the St Vincent's Hospital Melbourne *Choosing Wisely Collaborative Project* was unnecessary observations and arterial blood gases (ABGs) testing for patients in the department of critical care medicine (DCCM) who were deemed 'ward ready'.

A root cause analysis of why the clinical problems were happening was conducted.

It involved small workshops with frontline DCCM nursing staff and completing a [Cause and Effect Diagram](#) (also called a 'fishbone tool'), where staff were encouraged to discuss their thoughts around contributing factors to the completion of unnecessary ABGs and observations.

"The fishbone tool allowed staff to focus their thoughts around key areas such as process, environment, equipment and more," says Clare Hammer, continuous improvement coach at St Vincent's Hospital Melbourne.

"In addition to this, informal discussions with frontline staff also took place to gain a sense of why the unnecessary testing was happening," she says.

It found the causes for the unnecessary observations and ABG testing included:

- fear of repercussions e.g. 'missing' patient deterioration
- 'we have always done it that way' (DCCM culture)
- assumption that ownership of the decision to reduce observations and test frequency lies with medical staff.

Identifying the causes helped them proceed with the development of the design of the project.

Tools and Resources

Templates

- 📌 Choosing the right clinical problem

[Priority area identification algorithm](#)

- 📌 Identifying causes of the clinical problem

[Institute for Healthcare Improvement \(IHI\) - QI Essentials Toolkit](#)

(free access after you register)

Cause and Effect Diagram section for root cause analysis

(also called a fishbone diagram); Pages 3-6

Examples

- 📌 [Cause and Effect Diagram](#) developed by St Vincent's Hospital

Further information

📌 **Psychology of behaviour change**

The Institute for Healthcare Improvement [white paper](#) IHI Psychology of Change Framework

📌 **Understanding drivers of behaviour and how to match interventions to them**

[COM-B \('capability', 'opportunity', 'motivation' and 'behaviour'\) model](#)

📌 **Seminal papers**

Summary of different categories of interventions and the rationale for them for changing healthcare.

Grol R. Personal paper. Beliefs and evidence in changing clinical practice. BMJ. 1997 Aug 16;315(7105):418-21

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2127297/pdf/9277610.pdf>

A set of domains (eg knowledge, beliefs about consequences, and more) that enhance understanding of the behaviour change processes inherent in implementation of evidence-based practice.

Michie S, Johnston M, Abraham C, et al. Making psychological theory useful for implementing evidence based practice: a consensus approach. Qual Saf Health Care. 2005;14(1):26-33.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1743963/pdf/v014p00026.pdf>

Provides understanding of the cognitive biases that lead clinicians not to choose wisely.

Scott IA, et al. Countering cognitive biases in minimising low value care. Med J Aust. 2017 May 15;206(9):407-411.

<https://www.ncbi.nlm.nih.gov/pubmed/28490292>

References

1. Grol R. Personal paper. Beliefs and evidence in changing clinical practice. *BMJ* 1997;315:418-21. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2127297/pdf/9277610.pdf>
2. Ferlie EB, Shortell SM. Improving the quality of health care in the United Kingdom and the United States: a framework for change. *Milbank Q* 2001;79:281-315. <https://www.ncbi.nlm.nih.gov/pubmed/11439467>.
3. Cane J, O'Connor D, Michie S. Validation of the theoretical domains framework for use in behaviour change and implementation research. *Implementation Science* 2012;7:37. <https://doi.org/10.1186/1748-5908-7-37>.
4. Michie S, Johnston M, Abraham C, et al. Making psychological theory useful for implementing evidence based practice: a consensus approach. *Quality & safety in health care* 2005;14:26-33. <https://www.ncbi.nlm.nih.gov/pubmed/15692000>.
5. Prochaska JO, DiClemente CC, Norcross JC. In search of how people change. Applications to addictive behaviors. *Am Psychol* 1992;47:1102-14. <https://www.ncbi.nlm.nih.gov/pubmed/1329589>
6. Glasziou P, Haynes B. The paths from research to improved health outcomes. *ACP J Club* 2005;142:A8-10. <https://www.ncbi.nlm.nih.gov/pubmed/15739973>
7. Department of Health and Human Services. Evaluation Guide: Centre for Evaluation and Research, Department of Health and Human Services. August 2017. Melbourne, Australia.



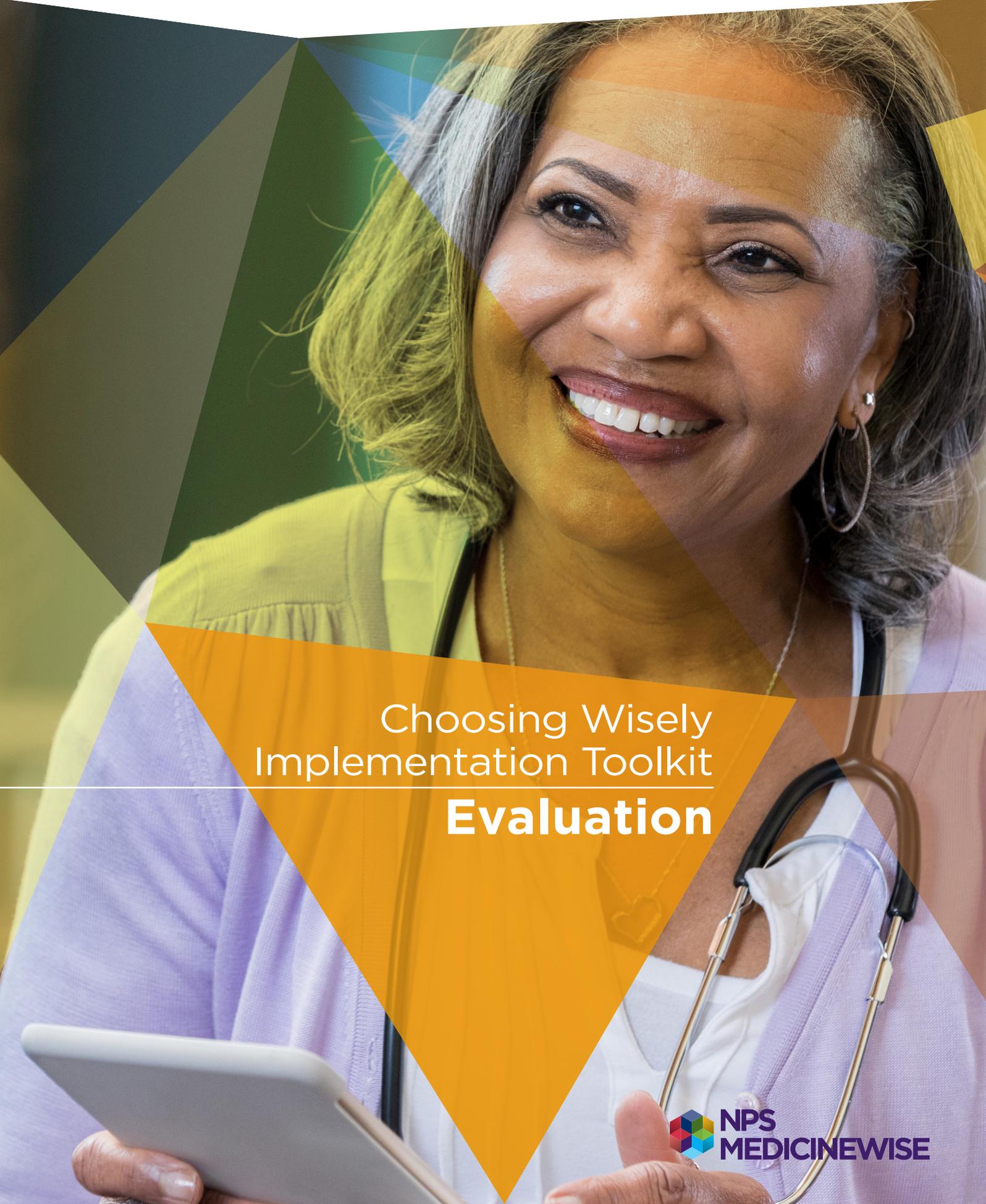
**Choosing Wisely
Australia**

An initiative of NPS MedicineWise

INNOVATION FUND PROJECT



**BETTER
CARE
VICTORIA**



Choosing Wisely
Implementation Toolkit
Evaluation



**NPS
MEDICINEWISE**



CONTENTS

Evaluation

Peninsula Health - What they did

What is evaluation?

Why is evaluation important?

Assist with design

Assess progress and success

When to evaluate?

What to do

Ethics approval

Design

Progress and Success

Sustain

Albury-Wodonga Health - What they did

Tools and Resources

Templates

Examples

Further information

EVALUATION

Peninsula Health – What they did



Clearly the aim of the Choosing Wisely Australia initiative as a whole is to reduce unnecessary tests and treatments.

So it would be reasonable that the baseline data for a Choosing Wisely project would be selected to enable measurement of a reduction in the percentage of patients receiving a particular test or treatment.

However, there is an alternative approach that was adopted by Peninsula Health.

Measuring the desired behaviour

“Our baseline data was selected to measure improvement in the behaviour we wanted them to do,” says Carla van Waart, the Choosing Wisely project officer.

“The project’s goal was to understand what influenced doctors ordering behaviour and then...select interventions that were specifically constructed to change that behaviour,” says Ms van Waart.

“Once we decided that guidelines were required to change ordering behaviour we checked our current ordering against the RANZCR [Royal Australian and New Zealand College of Radiologists] guidelines including whether the right modality was ordered for the presentation,” she says.

From this it was found that CT and x-ray were often used when MRI was the modality of choice for the clinical question.

“Ultimately this approach aims to achieve less ordering of unnecessary imaging in ED. By really understanding what influences a doctor ordering behaviour and using best practice in designing behaviour change interventions...we are able to better develop interventions that that will become sustainable change in behaviour,” says Ms van Waart.

What is evaluation?

Evaluation is defined as activities that measure and analyse information that has been gathered about the clinical problem that your Choosing Wisely project is tackling.

These activities may be divided into two categories of information gathering:

1. Qualitative; such as a survey that asks why and when a test or treatment is performed.
2. Quantitative; such as a data extract that shows how often a test or treatment is being performed.

The population being evaluated can include:

- 👤 clinicians; individual, team, unit (department), hospital or health service
- 👤 patients/consumers.

Clinical problem

Clinical problem is defined throughout this toolkit as the test or treatment that's being performed unnecessarily in your health service.



Evaluation and Design

Evaluation and Design are two separate chapters, but they overlap significantly.

They both use methods to measure and analyse. The main difference is that:

- 👤 Evaluation occurs in all three stages of a project; set up, deliver and sustain.

It has two key purposes, which are to:

1. assist with the design to identify the causes of the clinical problem to help determine which interventions (eg education, audit feedback etc.) will be implemented
2. assess the progress and measure success of a project.

- 👤 Design only occurs during the set up stage of a project.

Its purpose is to help plan and determine which interventions (eg education, audit feedback etc.) will be implemented.

Why is evaluation important?

Evaluation serves two key purposes:

Assist with design

Evaluation helps to identify the causes of the clinical problem.

Once these causes have been identified, interventions (eg education, audit feedback etc.) that are most likely to achieve success for your project are matched to these causes.

For more details on selecting interventions, see the Design chapter.

Assess progress and success

Like a research study, evaluation of your project starts with collecting baseline information.

This is used for making comparisons with information collected during and at the end of the delivery stage.

This enables you to see whether your project's interventions for the clinical problem are working in terms of:

- 👉 effectiveness
- 👉 efficiency
- 👉 appropriateness.

Furthermore, evaluation enables you to make informed decisions as to whether to:

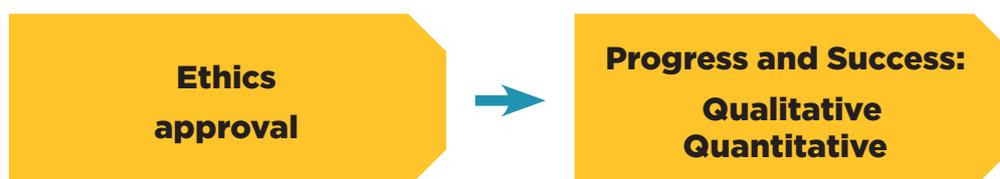
- 👉 continue the interventions
- 👉 scale the interventions up/down
- 👉 re-design the project using different interventions.

When to evaluate?



- 🟡 It's recommended that evaluation be done in all three stages of a project.
- 🟡 During the set up stage it:
 - ▷ Assists with the design to identify the causes of the clinical problem to help determine which interventions (eg education, audit feedback etc.) will be implemented.
 - ▷ Provides a baseline to measure and analyse progress and success.
- 🟡 During the deliver stage, it measures and analyses progress.
- 🟡 At the end of the deliver stage when the interventions have finished, it measures and analyses success of the project.
- 🟡 During the sustain stage it continues to measure and analyse ongoing performance, though with less intensity as during the project.

What to do



Ethics approval

The first thing you need to do is check if your project needs ethics approval.

Not every health service requires ethics approval. Also, Choosing Wisely projects tend to be assessed as low risk and hence not require it.

But if your health service does require ethics approval, it can take some time to receive it.

So it's best to get going as soon as possible. Usually this involves:

- 🟡 Meeting with the ethics officer at your health service to find out the requirements.
- 🟡 Getting help from someone who has received ethics approval before for either a research study or quality improvement project, such as from your steering committee or in your health service unit.

Design

For what to do for gathering qualitative and quantitative information during the set up stage, see the Design chapter.

Progress and Success

The activities that are required for robust evaluation may be divided into two categories; 1) qualitative and 2) quantitative. More often than not, a mixed methods approach that uses both qualitative and quantitative methods is best.

Qualitative

Qualitative information usually involves gathering non-numerical, textual data about the experiences, behaviour, perceptions, thoughts and feelings of individuals and groups of people you are trying to influence.

The recommended methods for gathering qualitative information are:

-  surveys
-  interviews
-  process mapping
-  observation
-  co-design.



Read the following for a description of the above methods:

-  [*Choosing Wisely Collaboration Implementation Toolkit Workshop 1*](#)

Methods for testing your questions – Page 19

Assessing progress and success may involve repeating the methods you conducted for the design of your project during the set up stage to collect baseline information, and comparing the changes achieved during and at the end of the deliver stage. Methods can also be employed independently of what was done for design during the set up stage. For example, a survey may be conducted just at the end of an education workshop.

Quantitative

Quantitative information explores patterns, trends and impacts through gathering numerical data. It is usually made up of data extracts from the health service medical records and test ordering systems.

Similar to qualitative methods, it may involve repeating the methods you conducted for the design of your project.

The purpose is to measure and analyse clinical activities, in particular through collecting baseline data and by making numerical comparisons and statistical inferences. For example, measuring the average number of tests performed in one month can be

the baseline data. This can be compared to the same month in the following year to measure progress and success.

The following are key tips for how to conduct numerical data extracts:

- 🟡 Have access to a health service data analyst (either through meetings or have that person be a member of one of your project groups) as early as possible.
- 🟡 Conduct a trial data extract first to identify any glitches or problems that need solving before collecting baseline information.
- 🟡 Data extracts may be used for the audit and feedback intervention, to let clinicians know how they're performing compared to colleagues or best practice.
- 🟡 Time series analysis, which involves conducting more than two snapshot measures, is the gold standard for collecting information about progress and success.
- 🟡 Population being measured and analysed needs to be truly representative of the population affected by the clinical problem.



Read the following for more detailed information:

- 🟡 [*Choosing Wisely Collaboration Implementation Toolkit Workshop 2*](#)

Data collection and measurement strategies - Pages 18-23

- 🟡 [*Program evaluation workshop; by Dr Tash Brusco for Better Care Victoria*](#)

An evaluation needs to answer a question - Pages 12-16

How to structure the key evaluation question - Page 17-18

Sustain

During the sustain stage, evaluation at a lower intensity (ie less formal or less often) can enable your health service quality improvement unit and clinicians to know what is happening with outcomes.

This may involve, for example:

- 🟡 eMRs using a data dashboard
- 🟡 ongoing monitoring, audit and feedback
- 🟡 consumer feedback through standard mechanisms
- 🟡 clinician feedback through clinical meetings
- 🟡 ensuring the outcomes are being reported through internal governance mechanisms.

Albury-Wodonga Health – What they did



The Albury-Wodonga Health (AWH) Choosing Wisely project was conducted in the Emergency Departments (EDs) at both Albury and Wodonga Hospitals.

The project objective was to reduce the number of chest x-rays undertaken in children aged 0-16 years in the ED with a diagnosis of bronchiolitis or asthma.

Data challenges

Project manager, Jennie Fisher, says “preliminary data validation was required to ensure consistent sample parameters between code sets in two separate state-based Emergency Department Information Systems.” The International Classification of Diseases (ICD) Code set for Albury Emergency Department (ED) is ICD 9 and Wodonga ED is ICD 10.

“The two code sets were extensively reviewed by a health information manager, emergency physician and paediatrician to determine which codes would be utilised,” says Ms Fisher.

A cross check between the medical record documentation and the diagnosis codes was performed to ensure a consistent sample.

Another challenge faced by the project was due to it “being conducted from June 2018 to June 2019, we weren’t able to have a baseline and post intervention data period in the winter months when the numbers of presentations of children presenting with bronchiolitis and asthma are known to be higher,” says Ms Fisher.

“The project steering committee has acknowledged that while the data is not 100% accurate primarily due to information system challenges, it is as accurate as could be expected in this emergency department setting,” she says.

Evaluation

The ED data has been reviewed weekly by the project clinical lead and project manager. The project has achieved a reduction during a 3-month post intervention data period from 12.4% to 1.4% of children aged 0-16 in ED with a diagnosis of asthma or bronchiolitis having a chest x-ray.

Interventions used to achieve this reduction have included education for clinical staff, provision of information in the patient file at triage including the AWH Bronchiolitis Clinical Pathway and the requirement that if an ED medical officer is considering ordering a chest x-ray on a child with bronchiolitis or asthma then they need to consult with the senior medical officer on duty prior to ordering the x-ray, says Ms Fisher.

“Collectively these interventions have been effective, however we do not have specific measures around the success of individual interventions,” she says.

Tools and Resources

Templates

- 📌 Evaluation graphs over time/Time series analysis

[Institute for Healthcare Improvement \(IHI\) - QI Essentials Toolkit](#)

(free access after you register)

Run Chart & Control Chart; Pages 43–46

Examples

- 📌 [Project report including evaluation of arterial blood gases \(ABGs\) testing](#); developed by St Vincent's Hospital see '2. Current state' section.

Further information

- 📌 Evaluation basics

[Program evaluation workshop; by Dr Tash Brusco for Better Care Victoria](#);

Pages 1–28

- 📌 Evaluation basics and templates

[Evaluation Toolkit for Breastfeeding Programs and Projects](#); developed by Government of Australia, Department of Health



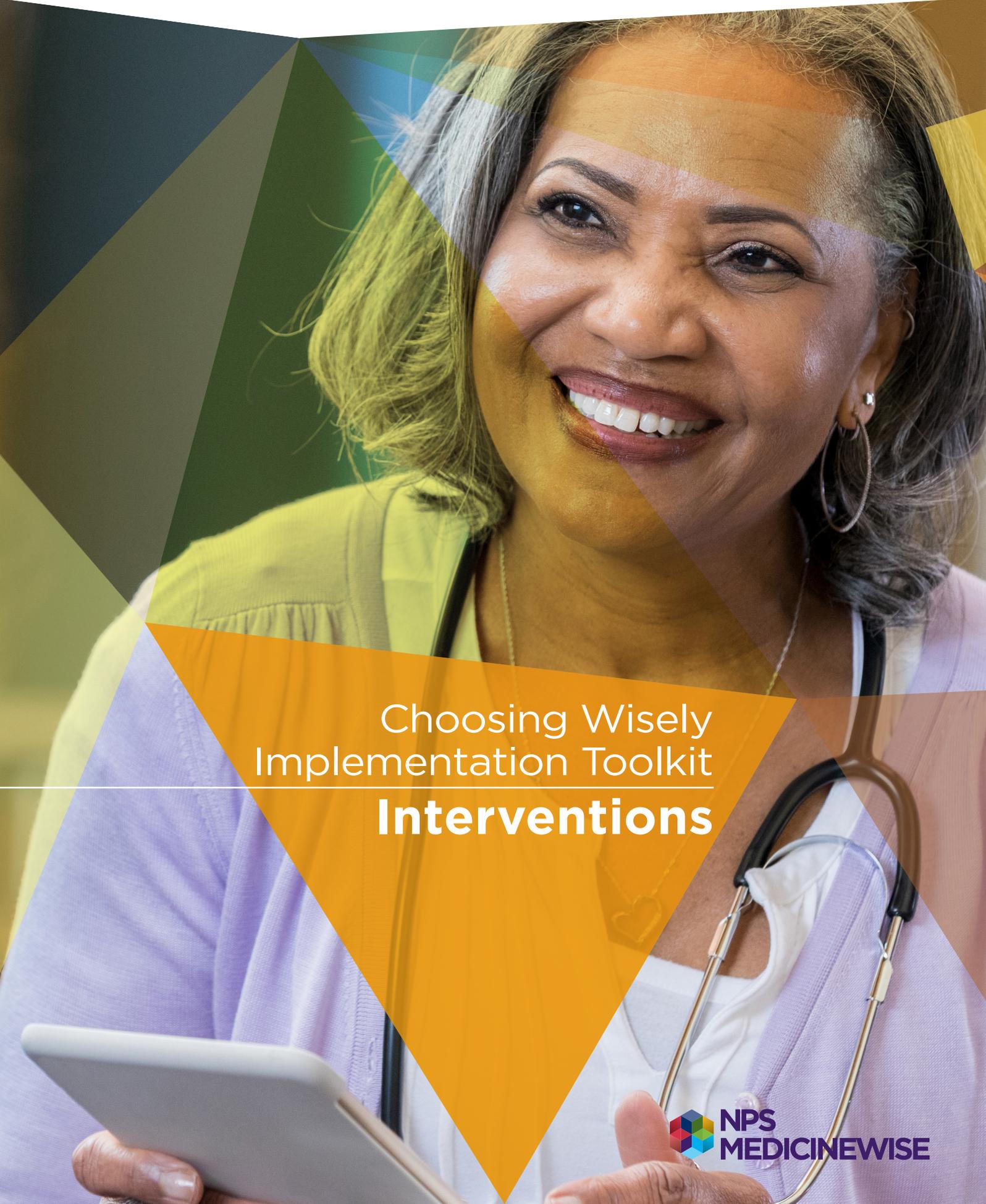
**Choosing Wisely
Australia**

An initiative of NPS MedicineWise

INNOVATION FUND PROJECT



**BETTER
CARE
VICTORIA**



Choosing Wisely
Implementation Toolkit
Interventions



**NPS
MEDICINEWISE**



CONTENTS

Interventions

Ballarat Health Services - What they did

What are interventions?

Why are interventions important?

When to implement interventions?

Peninsula Health - What they did

What to do

Sustain

St Vincent's Hospital Melbourne - What they did

Tools and Resources

Templates

Further information

Reference

INTERVENTIONS

Ballarat Health Services – What they did



After the causes of their clinical problem were clearly identified, the next step for Hannah Ryan-West and her project working group at the Ballarat Health Services Choosing Wisely project was to match interventions to them.

The two main causes for the unnecessary testing of venous blood gases (VBG) in the Emergency Department (ED) were 1) system-based and 2) a lack of information.

System-based intervention

“For the first intervention we decided to remove the blood gas syringes from the IV [intravenous] trolleys to reduce the ease of access that enabled nurses to unnecessarily do the testing,” says Ms Ryan-West, Choosing Wisely project officer.

“Instead, we created two blood gas stations that had fixed locations in the ED and couldn’t be moved around,” says Ms Ryan-West.

“So rather than grabbing a syringe from the IV trolley when putting a venous line in, making the syringes less accessible meant the nurses had to make a conscious decision to get a syringe to run a gas, rather than just grabbing it out with the blood tubes,” she says.

Information intervention

The second intervention that addressed the lack of information involved developing a clinical guideline on VBG testing in the ED.

The clinical guideline was then published as a poster and placed next to the two blood gas stations which contained the syringes, one next to the gas machine, and smaller-sized versions in each patient bay, so that all nurses had good access to the information about what to do.

Staff were given notification prior to the clinical guideline implementation and then education on the clinical guideline was shared using electronic sources, education sessions and posters in areas highly frequented by ED staff.

What are interventions?

Interventions are activities and actions that:

- 👉 help address the causes of your health service's clinical problem
- 👉 can lead to changes in healthcare that diminish the clinical problem.

They can be regarded as being like treatments that reduce symptoms of a chronic condition.

Many interventions are available to choose from for both clinicians and patients and consumers. Examples include:

- 👉 audit and feedback, education outreach and clinical decision support (CDS)
- 👉 decision aids and factsheets.

The specific interventions are explained in detail in the 'What to do' section below.

Why are interventions important?

Clearly you need to do something to achieve continuous improvement to healthcare in your health service - otherwise the clinical problem will continue or even get worse.

But which interventions should you choose? Consider the following:

- 👉 Should your Choosing Wisely project implement the same interventions another health service has implemented, because it successfully reduced the same clinical problem your health service is facing?

Yes and No. Learning from the experiences of other health services is recommended.

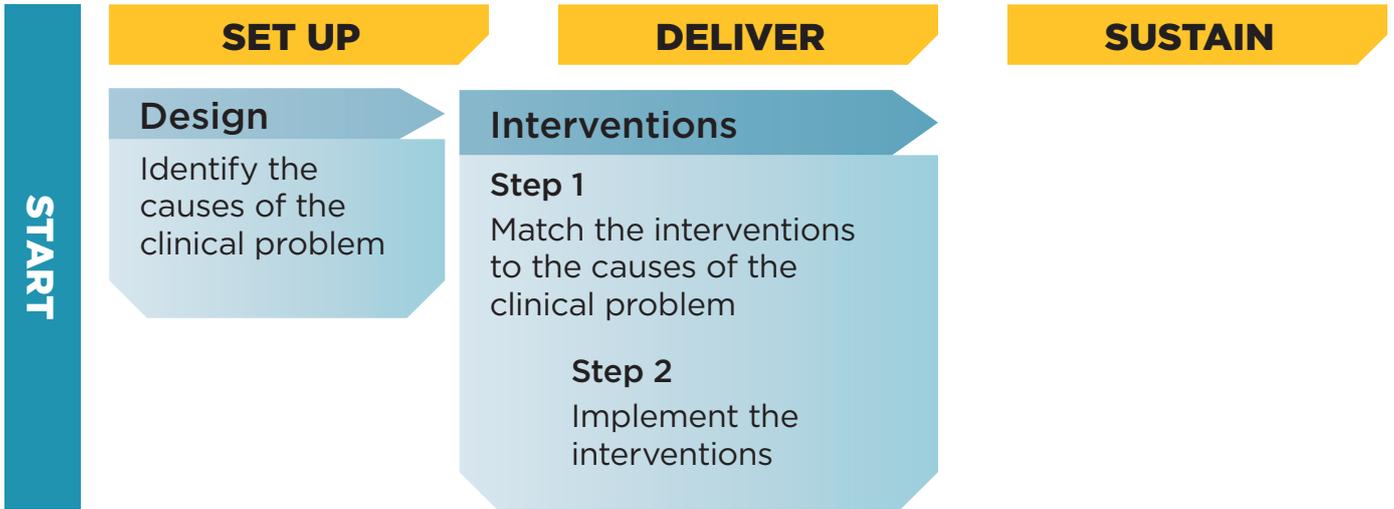
But don't just follow in their footsteps. Each health service can be different.

It's recommended to tailor the solutions to the causes that have been identified for your health service's clinical problem.

A mismatch between the causes of your health service's clinical problem and the interventions you choose for them can have a negative impact on the success of your Choosing Wisely project. For example, if your clinical staff has a knowledge gap, just providing an audit and feedback intervention can limit your chances of success. Rather, at the very least, an education intervention for clinical staff is also recommended.

Interventions also need to be targeted to a specific audience. For example, a fact sheet might be more suited for consumers, whereas a lecture is more appropriate for clinicians. Both these interventions, as well as others, may be used to address the same clinical problem.

When to implement interventions?



- 👉 Step 1 involves matching the interventions to the causes of the clinical problem. This starts after the design has been completed.
- 👉 Step 2 involves implementing the interventions that have been chosen. This starts at the beginning of the deliver stage.
- 👉 The interventions conclude at the end of the deliver stage.

Peninsula Health – What they did



Peninsula Health was thorough and clear about which interventions matched the causes for their Choosing Wisely project's clinical problem.

The project's goal was to ensure the ordering of CT scans for the lumbo-sacral spine in non-traumatic cases in the hospital ED according to the Royal Australian and New Zealand College of Radiologists (RANZCR) guidelines, says Carla van Waart, the Choosing Wisely project officer.

During the design they had found many reasons why the doctors were less likely to follow the RANZCR guidelines. Two findings that stood out were:

- having less experience due to less seniority
- patient expectations and demands to have imaging in general or a CT scan specifically done.

These reasons were grouped into themes that were allocated to categories of drivers of behaviour based on the [COM-B \('capability', 'opportunity', 'motivation' and 'behaviour'\) model](#).

Interventions were then matched to them. Two examples were:

- Less experience due to less seniority was understood as a capability/psychology driver and education was selected as an intervention.
- Patient expectations and demands to have imaging in general or a CT scan specifically done was found to be an opportunity/social driver and enabler of an intervention, such as providing doctors with a decision-making aid.

What to do

Intervention	Description and Implementation	Causes addressed
Audit and feedback	<p>Provides clinicians (doctors, nurses, etc.) with a summary of their performance for the clinical problem, over a specific period of time; for example, x-rays ordered for acute ankle injury.</p> <p>Audience: group (eg unit/department) or individual.</p> <p>For more information read: Choosing Wisely Collaboration Implementation Toolkit Workshop 1 Intervention 1 – Audit and Feedback; Pages 21–23</p>	<ul style="list-style-type: none"> 👉 lack of awareness 👉 perception/reality mismatch, for example overestimating their performance or under-estimating the problem.
Clinical guidance/guidelines development ¹	<p>Development of new evidence-based clinical guidance/guidelines or adaptation of existing ones by clinical experts working in your health service. This may include influential leaders in development.</p>	<ul style="list-style-type: none"> 👉 lack of guidance 👉 fear of change due to ‘no permission’.
Education ¹	<p>Learning through:</p> <ul style="list-style-type: none"> 👉 lectures from peers or clinical experts 👉 one’s own experiences and problem-solving, such as in small interactive groups or one-to-one peer interactions discussing cases or evidence. 	<ul style="list-style-type: none"> 👉 lack of peer support 👉 lack of knowledge 👉 lack of skills.
Educational outreach (academic detailing, educational visits)	<p>Facilitator trained on the clinical topic and causes of the clinical problem who meets (usually face to face, but also remotely via video) with clinicians, either as a group or individual, discussing cases or evidence. The facilitator can be an influential leader.</p> <p>For more information read: Choosing Wisely Collaboration Implementation Toolkit Workshop 1 Intervention 2 – Educational outreach; Pages 24–25</p>	<ul style="list-style-type: none"> 👉 lack of knowledge 👉 lack of skills 👉 beliefs/attitudes acting as barriers (e.g. fear of change, negativity to change).

Intervention	Description and Implementation	Causes addressed
Clinical decision support	<p>Interventions including:</p> <ul style="list-style-type: none"> 🔔 alerts, prompts and reminders 🔔 use of electronic medication or test ordering (i.e. computerised physician order entry, order sets) 🔔 electronic decision support systems 🔔 sharing of patient information across settings (i.e. health information exchange) 🔔 clinical workflows/algorithms/pathways. <p>For more information read: Choosing Wisely Collaboration Implementation Toolkit Workshop 1 Intervention 3 – Clinical decision support; Pages 26–27</p>	<ul style="list-style-type: none"> 🔔 specific clinical decision(s) not being made at right time 🔔 specific clinical role not making specific clinical decision(s) 🔔 clinician cognitive burden.
Systems-based ¹	<p>Creating the conditions for clinicians that makes tasks that change healthcare easier or harder to complete such as in the workplace or administration eg changes to order sets or formularies at a setting level.</p>	<ul style="list-style-type: none"> 🔔 opportunity for clinicians to reduce unnecessary healthcare is being missed due to conditions.
Patient and consumer-mediated	<p>Engaging patients and consumers to make decisions and participate in healthcare through:</p> <ul style="list-style-type: none"> 🔔 information; eg leaflets, factsheets about diagnosis/treatment of the condition, including lifestyle advice 🔔 activation; decision aids and action plans (similar to clinical decision support), physiological monitoring, self-evaluation 🔔 collaboration; communication with clinicians, social support. <p>Choosing Wisely Collaboration Implementation Toolkit Workshop 1 Intervention 4 – Patient mediated interventions; Pages 28–30</p>	<ul style="list-style-type: none"> 🔔 lack of knowledge 🔔 expectation of the healthcare even when it's unnecessary 🔔 adherence challenges 🔔 opportunity to make clinical decision(s) is being missed.

Table 1: Interventions; descriptions, implementation, causes addressed, other uses

Sustain

Once the deliver stage has been completed, many interventions such as development of evidence-based clinical guidance may not continue. Others that have been fully integrated into clinical practice, such as a clinical decision support tool, may continue on.

To enable changes achieved to be sustained, consider the following:

- Use dashboards in the electronic medical record (EMR) to give feedback to clinicians and units.
- Keep staff engaged – create opportunities for staff to share their experiences of the project through staff presentations or newsletter.
- Find ways to engage new staff to implement the change or be champions; for example, have the interventions included as part of the orientation for new staff.

St Vincent's Hospital Melbourne – What they did



A multi-layered approach to interventions was adopted by the St Vincent's Hospital Melbourne Choosing Wisely Collaborative Project after it identified the causes of unnecessary observations and arterial blood gas (ABGs) testing for patients in the department of critical care medicine (DCCM) who were deemed 'ward ready'.

Foundation interventions

First and foremost, the project wanted to establish a foundation for all the other interventions. It selected two interventions to achieve this:

1. the development of a clinical guideline called the 'ward ready' standard
2. education about the guideline.

"We engaged a DCCM consultant who, together with other clinicians including nurses and doctors, developed the 'ward ready' standard during several workshops conducted over a two-week period," says Clare Hammer, continuous improvement coach at St Vincent's Hospital Melbourne.

"The standard states that 'ward ready' patients should receive four-hourly cardiovascular and respiratory observations and no ABG testing unless clinically indicated and documented," says Ms Hammer.

"The project clinical lead then provided education for staff to support implementation of the standard. This was relatively simple and completed over a two-week period, at various times such as the end of shifts or during nursing handovers."

Specific interventions

Then for the specific causes of the clinical problem, interventions were matched to them.

For the nurses' fear of repercussions due to missing patient deterioration, key staff in this clinical space were engaged by the project to demonstrate senior support, says Ms Hammer.

These included the deputy director of intensive care unit (ICU), ICU consultants, nursing unit manager (NUM) and general manager of specialty services.

Another cause, that 'we have always done it that way', which reflected the DCCM culture, was addressed by inviting frontline staff to attend workshops where they were invited to question and challenge the status quo, says Ms Hammer.

"Lastly, the assumption that ownership of the decision to reduce test frequency lies with medical staff was countered by the 'ward ready' standard including collaborative decision-making between the senior registrar, team leader and associated nurse unit manager regarding when a patient is 'ward ready'," she says.

Tools and Resources

Templates

- 📌 Intervention selection based on what drives achievement of the project aim

[*Institute for Healthcare Improvement \(IHI\) - QI Essentials Toolkit*](#)

(free access after you register)

Driver diagram section for intervention selection; Pages 7-10

- 📌 Intervention selection based on categories of drivers behaviour

[*COM-B \('capability', 'opportunity', 'motivation' and 'behaviour'\) model*](#)

- 📌 Implementation canvas

[*Choosing Wisely Collaboration Implementation Toolkit Workshop 1*](#)

Implementation canvas; Page 33

Includes '*intervention selection*', as well as '*problem definition*' and '*change management*'.

- 📌 [*Lanyard - regular*](#)

- 📌 [*Lanyard - medical student*](#)

Further information

- Understanding drivers of behaviour and how to match interventions to them

[COM-B \('capability', 'opportunity', 'motivation' and 'behaviour'\) model](#)

- Matching interventions to specific causes

A detailed method for matching interventions to specific causes of the clinical problem is the Effective Practice and Organisation of Care (EPOC) taxonomy of health system interventions.

EPOC is divided into four domains: delivery, financial, governance and implementation strategies. Read about EPOC in the:

[Choosing Wisely Collaboration Implementation Toolkit Workshop 1](#)

How do you match the problem to the intervention? – Pages 21 and 22

- Seminal paper

Summary of different categories of interventions and the rationale for them for changing healthcare.

Grol R. Personal paper. Beliefs and evidence in changing clinical practice. BMJ. 1997 Aug 16;315(7105):418-21

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2127297/pdf/9277610.pdf>

Michie S, Johnston M, Abraham C, et al. Making psychological theory useful for implementing evidence based practice: a consensus approach. Qual Saf Health Care. 2005;14(1):26-33.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1743963/pdf/v014p00026.pdf>

Reference

- Grol R. Personal paper. Beliefs and evidence in changing clinical practice. BMJ 1997;315:418-21. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2127297/pdf/9277610.pdf>